UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

31625

7590

03/17/2009

BAKER BOTTS L.L.P. PATENT DEPARTMENT 98 SAN JACINTO BLVD., SUITE 1500 AUSTIN, TX 78701-4039

EXAMINER GISSEL, GUNNAR J ART UNIT PAPER NUMBER

2856

DATE MAILED: 03/17/2009

APPLICATION NO.	APPLICATION NO. FILING DATE FIRST NAME		ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,521	12/12/2007	Christian Zimmer	078857.0176	2040

TITLE OF INVENTION: METHOD AND DEVICE FOR ANALYZING THE COMBUSTION NOISE IN A CYLINDER OF AN INTERNAL

COMBUSTION ENGINE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/17/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current **SMALL ENTITY status:**

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

ppropriate. All further or dicated unless correcte naintenance fee notificat	correspondence including delow or directed oth ions.	g the Patent, advance or terwise in Block 1, by (a	rders and notification a) specifying a new co	of m orresp	aintenance fees woondence address;	ill be and/or	mailed to the current (b) indicating a sepa	correspo rate "FI	ondence address as EE ADDRESS" for
	NCE ADDRESS (Note: Use Bl		Note: A certificate of mailing can only be used for domestic mailings. Fee(s) Transmittal. This certificate cannot be used for any other accompapers. Each additional paper, such as an assignment or formal drawin have its own certificate of mailing or transmission.					ther accompanying	
31625	7590 03/17	/2009					of Mailing or Trans	missinn	
	RTMENT O BLVD., SUITE	1500		I here State addre trans	eby certify that the s Postal Service w essed to the Mail	is Fee(s ith suf Stop	s) Transmittal is being ficient postage for firs ISSUE FEE address 1) 273-2885, on the defeated and the second sec	deposit t class r above,	ted with the United mail in an envelope or being facsimile tated below.
AUSTIN, TX 78	701-4039								(Depositor's name)
									(Signature)
									(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	TOR		ATTO:	RNEY DOCKET NO.	CONF	IRMATION NO.
10/595,521	12/12/2007	•	Christian Zimmer			078857.0176 2040			2040
OMBUSTION ENGINE	E	DEVICE FOR ANALYZ						TERNA	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSUE	E FEE	TOTAL FEE(S) DUE		DATE DUE
nonprovisional	NO	\$1510	\$300	\$0 \$1810			06/17/2009		
EXAMI	INER	ART UNIT	CLASS-SUBCLASS						
GISSEL, G	UNNAR J	2856	073-035040						
☐ "Fee Address" indi	nge of Correspondence	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.							
PLEASE NOTE: Unle	ess an assignee is identi n in 37 CFR 3.11. Comp	A TO BE PRINTED ON The street of the selow, no assignee eletion of this form is NO	data will appear on th	ne par g an a	tent. If an assign ssignment. and STATE OR C	OUNT	RY)		
lease check the appropri	ate assignee category or	categories (will not be pr	rinted on the patent):	<u> </u>	Individual 🖵 Co	rporati	on or other private gro	up entit	y Government
	re submitted: o small entity discount p of Copies	permitted)	D. Payment of Fee(s): (A check is enclosed Payment by credit The Director is he overpayment, to D	ed. t card reby	. Form PTO-2038 authorized to char	is atta	ched.	ficiency	
_ ~ .	us (from status indicated SMALL ENTITY statu	· · · · · · · · · · · · · · · · · · ·	☐ b. Applicant is no	long	or claiming SMAI	LENT	ΓΙΤΥ status. See 37 CF	ID 1 270	(a)(2)
OTE: The Issue Fee and	l Publication Fee (if requ	uired) will not be accepted tes Patent and Trademark	d from anyone other th						
Authorized Signature					Date				
Typed or printed name					•				
his collection of informa n application. Confident ubmitting the completed ais form and/or suggestic ox 1450, Alexandria, V lexandria. Virginia 223	iality is governed by 35 application form to the ons for reducing this bui irginia 22313-1450. DC	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary den, should be sent to the NOT SEND FEES OR (on is required to obtain 1.14. This collection is depending upon the i e Chief Information O COMPLETED FORM	or re s esti ndivi fficer S TO	tain a benefit by the mated to take 12 rdual case. Any coo, U.S. Patent and THIS ADDRESS	ne publ ninutes mment Traden . SENI	ic which is to file (and to complete, includin s on the amount of tir nark Office, U.S. Depa D TO: Commissioner	by the g gather ne you r irtment or Pater	USPTO to process) ring, preparing, and require to complete of Commerce, P.O. nts, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/595,521		12/12/2007	Christian Zimmer	078857.0176	2040	
31625	7590	03/17/2009		EXAM	IINER	
BAKER BOT	TS L.L.	.P.	GISSEL, GUNNAR J			
PATENT DEP			ART UNIT PAPER NUMBER			
98 SAN JACINTO BLVD., SUITE 1500 AUSTIN, TX 78701-4039				2856 DATE MAILED: 03/17/200	9	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 3 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 3 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
	10/595,521	ZIMMER, CHRISTIAN	
Notice of Allowability	Examiner	Art Unit	
	Gunnar J. Gissel	2856	
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS	ears on the cover sheet w	rith the correspondence address	
herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	IGHTS . This application is		
1. This communication is responsive to <u>11/14/2008</u> .			
2. \boxtimes The allowed claim(s) is/are $2.3.5-14$ and $17-20$.			
 Acknowledgment is made of a claim for foreign priority ur a)	nder 35 U.S.C. § 119(a)-(d)) or (f).	
 Certified copies of the priority documents have 			
2. Certified copies of the priority documents have	• •		
3. Copies of the certified copies of the priority do	cuments have been receive	ed in this national stage application	from the
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		le a reply complying with the requir	ements
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			ICE OF
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.		
(a) \square including changes required by the Notice of Draftspers	on's Patent Drawing Revie	ew (PTO-948) attached	
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment o	or in the Office action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			ck) of
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT			e the
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. ☐ Notice of I	nformal Patent Application	
2. Notice of Draftperson's Patent Drawing Review (PTO-948)		Summary (PTO-413),	
3. Information Disclosure Statements (PTO/SB/08),		./Mail Date s Amendment/Comment	
Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🗌 Examiner'	s Statement of Reasons for Allowa	nce
or biological material	9.	<u>_</u> ·	

Application/Control Number: 10/595,521 Page 2

Art Unit: 2856

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Brian Prewitt on 3-9-2009.

The application has been amended as follows: 5. (Currently amended) A method according to claim 3, wherein a length of the measuring window is determined by analysis of an envelope which is formed from the received combustion noise.

Allowable Subject Matter

- 1. Claims 2, 3, 5-14, 17-20 are allowed.
- 2. The following is an examiner's statement of reasons for allowance: The prior art does not teach or suggest the combination of elements shown in the independent claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/595,521 Page 3

Art Unit: 2856

Response to Arguments

3. Applicant's arguments, see pages 7-8, filed 11/14/2008, with respect to the claims have been fully considered and are persuasive. The rejection of the claims has been withdrawn.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gunnar J. Gissel whose telephone number is (571)270-3411. The examiner can normally be reached on Mon-Fri, 7:30AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571)272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/GJG/

2/4/2009

Application/Control Number: 10/595,521 Page 4

Art Unit: 2856

/Hezron Williams/ Supervisory Patent Examiner, Art Unit 2856